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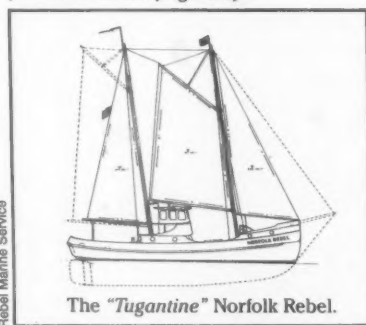
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Ride With the Wind (Continued from page 408)



The "Tugantine" Norfolk Rebel.

islands of Martha's Vineyard and Nantucket, Mass., in the sailing, 40-foot *Lily of Tisbury* since 1979; and finally, there's Capt. Lane Briggs of Rebel Marine Service, Inc., in Norfolk, Va., who has been using wind power as the result of a joke he played six years ago.

In 1975, Briggs hosted a regatta, or yacht race, and party for the sailboats at his marina. According to the regatta rules, Briggs had to participate in the race to attend his own party so he fitted his 46-foot tug *Steel Rebel* with sails. "It was no joke a few days later when the *Steel Rebel* was towing a barge on Chesapeake Bay and...[I] decided to raise his sails," Briggs says. The tug was more than a knot-and-a-half faster, and Briggs was able to throttle back his engine and use less fuel.

Briggs's experience with his *Steel Rebel* led to the design and construction of the sail-assisted, 48-foot *Norfolk Rebel*. And now, the government is keeping tabs on this *Rebel*, says National Marine Fisheries Service (NMFS) energy coordinator Ed Loughin: NMFS recently provided \$72,000 toward the *Norfolk Rebel*'s first year of operation in order to study the potential for fuel savings through the use of sail-assisted fishing vessels.

Loughin says the use of sails on U.S.

ships probably will be limited to smaller vessels like the *Norfolk Rebel*. "The Japanese [who last summer launched the *Shin Aitoku Maru*, an oil tanker with sails] are most likely to proceed with and be the leader of sail-assisted ships, because they don't have an indigenous source of alternative fuel," Loughin says. "The United States, on the other hand, has a number of alternative ways to power its major commercial fleet for the next 20 years... and sail-assisted ships is way down the line as an alternative." In fact, operators of large- and medium-sized U.S. cargo vessels probably will convert to a coal slurry, Loughin predicts.

Still, he says, sail-assistance may prove to be the preferred energy option for small-ship owners in the United States. "They're not about to pull out their diesel engines and convert to alternative fuel engines," Loughin explains. "They're going to be stuck with diesel engines so they'll have to minimize diesel use."

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